

IN THE CLAIMS

1. (Currently Amended) In a server, a method for providing information suitable for audio output, the method comprising:
  - receiving a web page including a first set of information over a network based on a request for the first set of information, receiving the first set of information further comprising:
    - receiving speech information specifying the first set of information;
    - generating a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, generating including interpreting at least one primitive construct based on the speech information and generating at least one additional primitive construct based on a request for a user-defined command, and
    - submitting the text request over the network;
  - accessing a tagged document in response to receiving the first set of information, the tagged document defined as an XML filtering document, accessing the tagged document further including:
    - determining an identity of the request for the first set of information;
  - and
  - accessing the tagged document based on the identity of the request, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request;
  - and
  - generating a second set of information including subsets of the web page suitable for audio output based on the first set of information and the tagged document, generating the second set of information suitable for audio output further comprising:

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selecting, based on predetermined expected patterns in the filtering document, at least one portion of the first set of information that is suitable for audio output; and

generating the second set of information based on selecting the at least one portion of the first set of information.

2. (Original) The method of claim 1, wherein:

the step of receiving the first set of information comprises receiving a web page based on a Uniform Resource Locator (URL) request for the web page;

the step of accessing the tagged document comprises accessing an Extensible Markup Language (XML) document; and

the step of generating the second set of information comprises generating filtered web content suitable for audio output based on the web page and the XML document.

Claims 3-5. (Cancelled).

6. (Previously Presented) The method of claim 2, wherein the step of generating the text request comprises applying a case-match technique to the speech information.

Claims 7-9. (Cancelled)

10. (Original) The method of claim 1, wherein the step of generating the second set of information suitable for audio output comprises:

generating text data suitable for audio output based on the first set of information and the tagged document, and

generating audio data based on the text data.

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11. (Original) The method of claim 10, wherein the step of generating the text data suitable for audio output comprises generating at least one response and the step of generating the audio data based on the text data comprises applying a text-to-speech (TTS) technique to the at least one response.
12. (Original) The method of claim 1, wherein the step of accessing the tagged document is performed based on the request for the first set of information and approximately concurrently with the step of receiving the first set of information.
13. (Currently Amended) The method of claim 404, wherein each of the first set of information, the tagged document, and the second set of information is at least one of a Hypertext Markup Language (HTML) page, an Extensible Markup Language (XML) page, a Virtual Reality Modeling Language (VRML) page, and a Standard Generic Markup Language (SGML) page.
14. (Currently Amended) A system for providing information suitable for audio output, the system comprising:
  - a document database configured for storing a plurality of tagged documents; and
  - a server comprising an executable resource, wherein the executable resource:
    - receives a web page including a first set of information over a network based on a request for the first set of information, the executable resource further operable to generate a text request for the first set of information based on an acoustic speech recognition (ASR) technique

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applied to the speech information, and submits the text request over the network, generating the text request further including:

receiving speech information specifying the first set of information Interpreting at least one primitive construct based on the speech information; and

generating at least one additional primitive construct based on a request for a user-defined command;

accesses a tagged document defined as an XML filtering document from the document database based on receiving the first set of information by

determining an identity of the request for the first set of information; and

accessing the tagged document based on the identity of the request, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request; and

generates the second set of information including subsets of the web page suitable for audio output based on the first set of information and the tagged document, such that the executable resource selects, based on predetermined expected patterns in the filtering document, at least one portion of the first set of information that is suitable for audio output, and generates the second set of information based on selecting the at least one portion of the first set of information.

15. (Original) The system of claim 14, wherein the first set of information is a web page based on a Uniform Resource Locator (URL) request for the web page; the tagged document is an Extensible Markup Language (XML) document; and the second set of information is filtered web content suitable for audio output based on the web page and the XML document.

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16. (Original) The system of claim 14, wherein the executable resource receives speech information specifying the first set of information, generates a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, and submits the text request over the network.

Claims 17-18. (Cancelled).

19. (Currently Amended) The system of claim 16[[14]], wherein the executable resource applies a case-match technique to the speech information to generate the text request.

Claims 20-21. (Cancelled).

22. (Currently Amended) The system of claim 19[[14]], wherein the executable resource selects at least one portion of the first set of information that is suitable for audio output, and generates the second set of information based on selecting the at least one portion of the first set of information.
23. (Currently Amended) The system of claim 22[[14]], wherein the executable resource generates text data suitable for audio output based on the first set of information and the tagged document, and the executable resource generates audio data based on the text data.
24. (Original) The system of claim 23, wherein the text data comprises at least one response, and the executable resource applies a text-to-speech (TTS) technique to the at least one response to generate the audio data.

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25. (Currently Amended) The system of claim 24[[14]], wherein the executable resource, in an approximately concurrent time frame:
- accesses the tagged document based on the request for the first set of information,
  - and receives the first set of information.
26. (Currently Amended) The system of claim 25[[14]], wherein each of the first set of information, the tagged document, and the second set of information is at least one of a Hypertext Markup Language (HTML) page, an Extensible Markup Language (XML) page, a Virtual Reality Modeling Language (VRML) page, and a Standard Generic Markup Language (SGML) page.
27. (Currently Amended) A computer program product that includes a computer readable medium having instructions stored thereon for providing information suitable for audio output, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:
- receiving a web page including a first set of information over a network based on a request for the first set of information, receiving the first set of information further comprising:
    - receiving speech information specifying the first set of information;
    - generating a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, generating including interpreting at least one primitive construct based on the speech information and generating at least one additional primitive construct based on a request for a user-defined command, and
    - submitting the text request over the network;

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accessing a tagged document defined as an XML filtering document in response to receiving the first set of information, accessing the tagged document further including:

determining an identity of the request for the first set of information; and

accessing the tagged document based on the identity of the request, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request; and

generating a second set of information including subsets of the web page suitable for audio output based on the first set of information and the tagged document, generating the second set of information suitable for audio output further comprising:

selecting, based on predetermined expected patterns in the filtering document, at least one portion of the first set of information that is suitable for audio output; and

generating the second set of information based on selecting the at least one portion of the first set of information.

28. (Original) The computer program product of claim 27, wherein:

the step of receiving the first set of information comprises receiving a web page based on a Uniform Resource Locator (URL) request for the web page;

the step of accessing the tagged document comprises accessing an Extensible Markup Language (XML) document; and

the step of generating the second set of information comprises generating filtering web content suitable for audio output based on the web page and the XML document.

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29. (Currently Amended) A computer program propagated signal product embodied in a propagated medium, having instructions for providing information suitable for audio output, such that the instructions, when carried out by a computer, cause the computer to perform the steps of:
- receiving a web page including a first set of information over a network based on a request for the first set of information, receiving the first set of information further comprising:
    - receiving speech information specifying the first set of information;
    - generating a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, generating including interpreting at least one primitive construct based on the speech information and generating at least one additional primitive construct based on a request for a user-defined command, and
    - submitting the text request over the network;
    - accessing a tagged document defined as an XML filtering document in response to receiving the first set of information, accessing the tagged document further including:
      - determining an identity of the request for the first set of information; and
      - accessing the tagged document based on the identity of the request, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request; and
  - generating a second set of information including subsets of the web page suitable for audio output based on the first set of information and the tagged document, generating the second set of information suitable for audio output further comprising:

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selecting, based on predetermined expected patterns in the filtering document, at least one portion of the first set of information that is suitable for audio output; and

generating the second set of information based on selecting the at least one portion of the first set of information.

30. (Original) The computer program propagated signal product of claim 29, wherein:

the step of receiving the first set of information comprises receiving a web page based on a Uniform Resource Locator (URL) request for the web page;

the step of accessing the tagged document comprises accessing an Extensible Markup Language (XML) document; and

the step of generating the second set of information comprises generating filtered web content suitable for audio output based on the web page and the XML document.

31. (Currently Amended) A system for providing information suitable for audio output, the system comprising:

a document database configured for storing a plurality of tagged document pages;

means for producing a second set of information suitable for audio output, wherein the producing means receives a web page including a first set of information over a network based on a request for the first set of information, receiving the first set of information further comprising:

receiving speech information specifying the first set of information;

generating a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, generating including interpreting at least

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one primitive construct based on the speech information and generating at least one additional primitive construct based on a request for a user-defined command, and

submitting the text request over the network;

accesses a tagged document defined as an XML filtering document from the document database based on receiving the first set of information by:

determining an identity of the request for the first set of information; and

accessing the tagged document based on the identity of the request, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request; and

generating the second set of information including subsets of the web page suitable for audio output based on the first set of information and the tagged document, generating the second set of information suitable for audio output comprises:

selecting, based on predetermined expected patterns in the filtering document, at least one portion of the first set of information that is suitable for audio output; and

generating the second set of information based on selecting the at least one portion of the first set of information.

32. (Original) The system of claim 31, wherein the first set of information is a web page based on a Uniform Resource Locator (URL) request for the web page; the tagged document is an Extensible Markup Language (XML) document; and the second set of information is filtered web content suitable for audio output based on the web page and the XML document.

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33. (Currently Amended) A method for navigating a web by voice in a server configured for executing voice web applications, the method comprising:
- requesting a web page including a first set of information based on a voice web navigation request, requesting the web page further comprising:
    - receiving speech information specifying the first set of information;
    - generating a text request for the first set of information based on an acoustic speech recognition (ASR) technique applied to the speech information, generating including interpreting at least one primitive construct based on the speech information and generating at least one additional primitive construct based on a request for a user-defined command, and
    - submitting the text request over the network;
  - receiving a retrieved web page based on the voice web navigation request;
  - accessing an tagged document defined as an XML filtering document extensible markup language page in response to receiving the retrieved web page, accessing the tagged document further including:
    - determining an identity of the request for the first set of information; and
    - accessing the tagged document based on the identity of the request, wherein the identity of the request is based on at least one of an identifier for an originator of the request and an identifier for a destination of the request;
  - generating filtered web content including subsets of the web page suitable for audio output based on the retrieved web page and the extensible markup language page; and
  - generating the at least one audio output file based on the filtered web content, generating audio output file further comprising:

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selecting, based on predetermined expected patterns in the filtering document, at least one portion of the retrieved web page that is suitable for audio output; and

generating the audio output file based on selecting the at least one portion of the first set of information.

34. (Original) The method of claim 33, wherein the step of requesting the web page based on the voice web navigation request comprises the steps of:
- receiving speech information specifying the web page;
  - generating a text request for the web page based on an acoustic speech recognition (ASR) technique applied to the speech information, and
  - submitting the text request over the network.
35. (Currently Amended) The method of claim ~~34~~33, wherein the step of accessing the extensible markup language document in response to receiving the retrieved web page comprises:
- determining an identity of the voice web navigation request for the web page, and
  - accessing the extensible markup language page based on the identity of the voice web navigation request.
36. (Original) The method of claim 35, wherein the identity of the request is based on at least one of an identifier for an originator of the voice web navigation request and an identifier for a destination of the voice web navigation request.
37. (Currently Amended) The method of claim ~~36~~33, wherein the step of generating the filtered web content suitable for audio output comprises:

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generating text data suitable for audio output based on the retrieved web page and the extensible markup language document, and generating audio data based on the text data.

38. (Currently Amended) The method of claim 124 wherein the method of accessing a tagged document comprises accessing a plurality of tagged documents, the plurality of tagged documents to define user interface logistics and to operate the server; and,
- wherein the method of generating a second set of information comprises generating a second set of information suitable for audio input based on the first set of information and the plurality of tagged documents.
39. (Previously Presented) The method of claim 38 wherein the plurality of tagged documents includes at least one menu document, at least one activity document, at least one decision document and at least one application state document.
40. (Currently Amended) The method of claim ~~38~~39 wherein the plurality of tagged documents includes at least one filtering document to be applied to the first set of information to generate the second set of information suitable for audio output.
41. (Currently Amended) The method of claim 440 wherein the step of generating the second set of information further comprises the step of executing voice application operations from the tagged document to generate the information suitable for audio output.
42. (Currently Amended) A method for voice-based navigation in a server configured for executing voice web applications comprising:

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receiving a voice-based request to navigate the web from an audio communication device operable to provide the voice-based request in response to a menu generated based on a specific application-defining document operable to provide parameters and options;

associating the voice-based request with the specific application-defining document;

searching for primitive constructs in the voice-based request;

constructing a text-based request based on the primitive constructs identified from the voice-based request;

generating the text-based request to navigate the web based on the primitive constructs in the voice-based request from at least one of a database and a proxy server;

requesting the web page using the text-based web navigation request by posting a generated URL to a web server to execute the request for the web page;

receiving the requested web page from the web server;

accessing a tagged document defined as an XML filtering document page from an application document database using the application-defining document associated with the voice-based request, the filtering document page employing a markup language and operable to filter the retrieved web page to provide generated content suitable for audio output, the requesting the web page and accessing the filtering document occurring in a substantially concurrent time frame;

generating the filtered web content including subsets of the web page from the retrieved web page and the filtering document page indicated by the application-defining document associated with the voice-based request;

generating at least one audio output file based on the filtered web content via a text-to-speech (TTS) technique operable to convert the text in the filtered web content to audio output files, generating the audio output file further comprising:

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selecting, based on predetermined expected patterns in the filtering document, at least one portion of the retrieved web page that is suitable for audio output; and

generating the audio output file based on selecting the at least one portion of the first set of information; and

sending the signals via a network connection to the user audio communication device.

43. (Previously Presented) The method of claim 42 wherein the voice based request is operative to identify a particular user via a user identifier number indicative of an LDAP resource having personal data and class of data information on individual users.

44. (Currently Amended) The method of claim 43 wherein a web navigation application uses a case-match approach to interpret the primitive constructs and determine web navigation commands are included in the text-based request.

45. (Currently Amended) The method of claim 44 further comprising sending the filtered web content in an HTML page to an intermediary proxy browser operable to generate signals which the user audio communication device converts to audible sound.